

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

CLAIMS

What is claimed is:

- 1 1. A method of manufacturing a color electrophoretic display comprising the steps
2 of:
3 (a) providing a substrate having at least two electrodes disposed thereon;
4 (b) selectively depositing a first plurality of electrophoretic display elements in
5 substantial registration with a first electrode, each of said first plurality of display
6 elements comprising a capsule containing a plurality of a first species of particles,
7 said first species of particles responsive to a first applied electric field and having a
8 first optical property; and
9 (c) selectively depositing a second plurality of electrophoretic display elements in
10 substantial registration with a second electrode, each of said second plurality of
11 display elements comprising a capsule containing a plurality of a second species of
12 particles, said second species of particles responsive to a second applied electric field
13 and having a second optical property.
- 1 2. The method of claim 1, wherein step (a) comprises the step of: providing a
2 substrate having at least two electrodes disposed thereon, at least one of said at least
3 two electrodes having a pre-determined pattern.
- 1 3. The method of claim 1, wherein step (a) comprises the steps of:
2 (a-a) providing a substrate; and
3 (a-b) depositing at least two electrodes on said substrate.
- 1 4. The method of claim 3, wherein step (a-b) comprises depositing at least two
2 electrodes on said substrate, at least one of said at least two electrodes having a pre-
3 determined pattern.

1 5. The method of claim 1, wherein step (b) comprises selectively depositing by ink-
2 jet printing a first plurality of electrophoretic display elements in substantial registration
3 with the at least one electrode, each of said first plurality of display elements comprising
4 a capsule containing a plurality of a first species of particles, said first species of particles
5 responsive to a first applied electric field and having a first optical property.

1 6. The method of claim 1, wherein step (b) comprises selectively depositing by
2 screen printing a first plurality of electrophoretic display elements in substantial
3 registration with the at least one electrode, each of said first plurality of display elements
4 comprising a capsule containing a plurality of a first species of particles, said first species
5 of particles responsive to a first applied electric field and having a first optical property.

1 7. The method of claim 1, wherein step (b) comprises selectively depositing by
2 gravure printing a first plurality of electrophoretic display elements in substantial
3 registration with the at least one electrode, each of said first plurality of display elements
4 comprising a capsule containing a plurality of a first species of particles, said first species
5 of particles responsive to a first applied electric field and having a first optical property.

1 8. The method of claim 1, wherein step (b) comprises:
2 (b-a) providing a carrier bearing a first plurality of electrophoretic display elements,
3 each of said first plurality of display elements comprising a capsule containing a plurality
4 of a first species of particles, said first species of particles responsive to a first applied
5 electric field and having a first optical property;

6 (b-b) disposing said carrier adjacent said substrate; and

7 (b-c) applying an electrical signal to said at least one electrode to transfer at least
8 some of said first plurality of electrophoretic display elements from said carrier to said
9 substrate in substantial registration with said at least one electrode.

1 9. The method of claim 8, wherein step (b-a) comprises providing a carrier bearing a
2 first plurality of electrophoretic display elements, each of said first plurality of display

3 elements comprising a capsule containing a plurality of a first species of particles and a
4 dyed fluid, said first species of particles responsive to a first applied electric field and
5 having a first optical property.

1 10. The method of claim 8, wherein said first plurality of electrophoretic display
2 elements is held upon said carrier by an applied electric field.

1 11. The method of claim 8, wherein said first plurality of electrophoretic display
2 elements is held upon said carrier by electrostatic forces.

1 12. The method of claim 8, wherein said first plurality of electrophoretic display
2 elements is held upon said carrier by chemical bonding forces.

1 13. The method of claim 8, wherein said first plurality of electrophoretic display
2 elements is held upon said carrier by surface tension.

1 14. The method of claim 8, wherein step (b-a) comprises providing a carrier having a
2 substantially flat surface, and bearing a first plurality of electrophoretic display elements,
3 each of said first plurality of display elements comprising a capsule containing a plurality
4 of a first species of particles, said first species of particles responsive to a first applied
5 electric field and having a first optical property.

1 15. The method of claim 8, wherein step (b-a) comprises providing a carrier having a
2 substantially cylindrical surface, and bearing a first plurality of display electrophoretic
3 elements, each of said first plurality of display elements comprising a capsule containing
4 a plurality of a first species of particles, said first species of particles responsive to a first
5 applied electric field and having a first optical property.

1 16. The method of claim 4, wherein step (b-a) comprises providing a carrier that is a
2 fluid, bearing a first plurality of electrophoretic display elements, each of said first

3 plurality of display elements comprising a capsule containing a plurality of a first species
4 of particles, said first species of particles responsive to a first applied electric field and
5 having a first optical property.

1 17. An electrophoretic display manufactured according to the process of claim 1.

1 18. A method of manufacturing an electrophoretic display comprising the steps of:

2 (a) providing a substrate;

3 (b) selectively depositing in a pre-determined pattern upon said substrate a first
4 plurality of electrophoretic display elements, each of said first plurality of display
5 elements comprising a capsule containing a plurality of a first species of particles, said
6 first species of particles responsive to a first applied electric field and having a first
7 optical property;

8 (c) selectively depositing at least one electrode upon said first plurality of
9 electrophoretic display elements;

10 (d) selectively depositing in a pre-determined pattern upon said substrate a second
11 plurality of electrophoretic display elements, each of said second plurality of display
12 elements comprising a capsule containing a plurality of a second species of particles, said
13 second species of particles responsive to a second applied electric field and having a
14 second optical property; and

15 (e) selectively depositing at least one electrode upon said second plurality of
16 electrophoretic display elements.

1 19. The method of claim 18, wherein step (b) comprises selectively depositing in a
2 pre-determined pattern upon said substrate a first plurality of electrophoretic display
3 elements, each of said first plurality of display elements comprising a capsule containing
4 a plurality of a first species of particles and a dyed fluid, said first species of particles
5 responsive to a first applied electric field and having a first optical property.

1 20. The method of claim 18, wherein step (c) comprises selectively depositing at least
2 one electrode upon, and in substantial registration with, said first plurality of
3 electrophoretic display elements.

1 21. A method of manufacturing an electrophoretic display comprising the steps of:
2 (a) providing a substrate;
3 (b) selectively depositing upon said substrate at least two electrodes;
4 (c) selectively depositing a first plurality of electrophoretic display elements in
5 substantial registration with a first electrode, each of said first plurality of display
6 elements comprising a capsule containing a plurality of a first species of particles, said
7 first species of particles responsive to a first applied electric field and having a first
8 optical property; and
9 (d) selectively depositing a second plurality of electrophoretic display elements in
10 substantial registration with a second electrode, each of said second plurality of display
11 elements comprising a capsule containing a plurality of a second species of particles, said
12 second species of particles responsive to a second applied electric field and having a
13 second optical property.

1 22. The method of claim 21, wherein step (b) comprises selectively depositing in a
2 pre-determined pattern upon said substrate at least two electrodes.

1 23. The method of claim 22, wherein step (c) comprises selectively depositing upon,
2 and in substantial registration with, a first electrode a first plurality of electrophoretic
3 display elements, each of said first plurality of display elements comprising a capsule
4 containing a plurality of a first species of particles, said first species of particles
5 responsive to a first applied electric field and having a first optical property.

1 24. A method of manufacturing an electrophoretic display comprising the steps of:
2 (a) providing a first substrate;

- 3 (b) selectively depositing in a pre-determined pattern upon said first substrate a first
4 plurality of electrophoretic display elements, each of said first plurality of display
5 elements comprising a capsule containing a plurality of a first species of particles, said
6 first species of particles responsive to a first applied electric field and having a first
7 optical property;
- 8 (c) providing a second substrate;
- 9 (d) depositing at least one electrode upon said second substrate; and
- 10 (e) disposing said first substrate adjacent said second substrate with said first plurality
11 of electrophoretic display elements adjacent said at least one electrode.

1 25. The method of claim 24, wherein step (d) comprises depositing at least one
2 electrode upon said second substrate in a pattern substantially calculated to match said
3 pre-determined pattern.